



DOCKET NO.: C0989.70049US01

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Zhao et al.  
Serial No.: 10/773,084  
Confirmation No.: 3297  
Filed: February 5, 2004  
For: METHODS AND APPARATI USING SINGLE POLYMER  
ANALYSIS  
Examiner: Ethan C. Whisenant  
Art Unit: 1634

---

**CERTIFICATE OF MAILING UNDER 37 C.F.R. §1.8(a)**

The undersigned hereby certifies that this document is being placed in the United States mail with first-class postage attached, addressed to MAIL STOP AMENDMENT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the 30th day of May, 2006.

  
Nicole M. Hawes

---

**MAIL STOP AMENDMENT**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**STATEMENT FILED PURSUANT TO THE DUTY OF  
DISCLOSURE UNDER 37 CFR §§1.56, 1.97 AND 1.98**

Sir:

Pursuant to the duty of disclosure under 37 C.F.R. §§1.56, 1.97 and 1.98, the Applicant requests consideration of this Information Disclosure Statement.

**PART I: Compliance with 37 C.F.R. §1.97**

This Information Disclosure Statement has been filed more than three months after the filing date of this application and after the mailing date of the first Office action, but before the mailing date of any final action under 37 C.F.R. §1.113, a Notice of Allowance under 37 C.F.R. §1.311, or an action that otherwise closes prosecution in this application.

The fee of \$180.00 as set forth in 37 C.F.R. §1.17(p) is enclosed.

1033827.1

06/06/2006 SSITHIB1 00000007 10773084

02 FC:1806

180.00 qp

PART II: Information Cited

The Applicant hereby makes of record in the above-identified application the information listed on the attached form PTO-1449 (modified PTO/SB/08). The order of presentation of the references should not be construed as an indication of the importance of the references.

The Applicant hereby makes the following additional information of record in the above-identified application.

The Applicant would like to bring to the Examiner's attention the following co-pending applications that may contain subject matter related to this application:

<u>Serial No.</u>	<u>Filing Date</u>	<u>Inventor(s)</u>	<u>Docket No.</u>
11/180,980	07-13-2005	Lee et al.	*C0989.70074US01
11/210,111	08-23-2005	Randall et al.	*C0989.70067US01
11/250,179	10-13-2005	Larson et al.	*C0989.70076US01
11/253,051	10-18-2005	Nilsen et al.	*C0989.70077US01
11/286,714	11-23-2005	Nadel et al.	*C0989.70072US01
11/311,696	12-19-2005	Larson et al.	*C0989.70079US01
11/364,856	02-27-2006	White et al.	*C0989.70087US01

\*A copy of this reference is not provided as the Office has waived the requirement under 37 C.F.R. 1.98(a)(2)(iii) for submitting a copy of a cited U.S. patent application if it is scanned to the Image File Wrapper system and is available on Private PAIR.

PART III: Remarks

Documents cited anywhere in the Information Disclosure Statement are enclosed unless otherwise indicated. It is respectfully requested that:

1. The Examiner consider completely the cited information, along with any other information, in reaching a determination concerning the patentability of the present claims;
2. The enclosed form PTO-1449 (modified PTO/SB/08) be signed by the Examiner to evidence that the cited information has been fully considered by the Patent and Trademark Office during the examination of this application;
3. The citations for the information be printed on any patent which issues from this application.

By submitting this Information Disclosure Statement, the Applicant makes no representation that a search has been performed, of the extent of any search performed, or that more relevant information does not exist.

By submitting this Information Disclosure Statement, the Applicant makes no representation that the information cited in the Statement is, or is considered to be, material to patentability as defined in 37 C.F.R. §1.56(b).


By submitting this Information Disclosure Statement, the Applicant makes no representation that the information cited in the Statement is, or is considered to be, in fact, prior art as defined by 35 U.S.C. §102.

Notwithstanding any statements by the Applicant, the Examiner is urged to form his or her own conclusion regarding the relevance of the cited information.

An early and favorable action is hereby requested.

Respectfully submitted,

By:



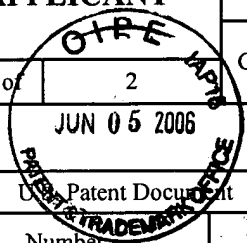
Maria A. Trevisan, Reg. No. 48,207  
Wolf, Greenfield & Sacks, P.C.  
600 Atlantic Avenue  
Boston, Massachusetts 02210-2206  
Telephone: (617) 646-8000

Docket No.: C0989.70049US01

Date: May 30, 2006

xNDDx

FORM PTO-1449/A and B (modified PTO/SB/08)  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>		APPLICATION NO.: 10/773,084		ATTY. DOCKET NO.: C0989.70049US01	
		FILING DATE: February 5, 2004		CONFIRMATION NO.: 3297	
		APPLICANT: Zhao et al.			
		GROUP ART UNIT: 1634		EXAMINER: Ethan C. Whisenant	
Sheet	1	of	2		



### U.S. PATENT DOCUMENTS

Examiner's Initials #	Cite No.	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication or Issue of Cited Document MM-DD-YYYY
		Number	Kind Code		
		5,356,776		Kambara et al.	10-18-1994
		5,707,797		Windle	01-13-1998
		6,210,896	B1	Chan	04-03-2001
		6,263,286	B1	Gilmanshin et al.	06-17-2001
		6,355,420	B1	Chan	03-12-2002
		6,403,311	B1	Chan	06-11-2002
		6,696,022	B1	Chan et al.	02-24-2004
		6,762,059	B2	Chan et al.	07-13-2004
		6,772,070	B2	Gilmanshin et al.	08-16-2004
		6,790,671	B1	Austin et al.	09-14-2004
		6,927,065		Chan et al.	08-09-2005
		2003-0165929	A1	Rigler et al.	09-04-2003
		2005-0142595	A1	Maletta et al.	06-30-2005
		2005-0153354	A1	Gilmanshin et al.	07-04-2005
		2005-0196790	A1	Rooke et al.	09-08-2005
		2005-0221408	A1	Nalefski et al.	10-06-2005
		2006-0078915	A1	Fuchs et al.	04-13-2006

### FOREIGN PATENT DOCUMENTS

Examiner's Initials #	Cite No.	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Translation (Y/N)
		Office/ Country	Number	Kind Code			
*		WO	98/10097	A2	Pioneer Hi-Bred International, Inc.	03-12-1998	

### OTHER ART — NON PATENT LITERATURE DOCUMENTS

Examiner's Initials #	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	Translation (Y/N)
*		CASTRO et al., Single-Molecule Electrophoresis: Applications to Biomolecular Detection. SPIE. 1995; 2396:79-85.	
*		CASTRO et al., Single-molecule detection of specific nucleic acid sequences in unamplified genomic DNA. Anal Chem. 1997 Oct 1;69(19):3915-20.	

EXAMINER:	DATE CONSIDERED:
-----------	------------------

\* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

FORM PTO-1449/A and B (modified PTO/SB/08)  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>				APPLICATION NO.: 10/773,084	ATTY. DOCKET NO.: C0989.70049US01
				FILING DATE: February 5, 2004	CONFIRMATION NO.: 3297
				APPLICANT: Zhao et al.	
				GROUP ART UNIT: 1634	EXAMINER: Ethan C. Whisenant
Sheet	2	of	2		

		CHAN et al., DNA mapping using microfluidic stretching and single-molecule detection of fluorescent site-specific tags. <i>Genome Res.</i> 2004 Jun;14(6):1137-46.	
*		D'ANTONI et al., Rapid quantitative analysis using a single molecule counting approach. <i>Anal Biochem.</i> 2006 May 1;352(1):97-109.	
		EIGEN et al., Sorting single molecules: Application to diagnostics and evolutionary biotechnology. <i>Proc Natl Acad Sci U S A.</i> 1994 Jun 21;91(13):5740-7.	
*		EKSTRØM et al., Two-point fluorescence detection and automated fraction collection applied to constant denaturant capillary electrophoresis. <i>Biotechniques.</i> 2000 Sep;29(3):582-4, 586-9.	
*		HEINZE et al., Triple-color coincidence analysis: one step further in following higher order molecular complex formation. <i>Biophys J.</i> 2004 Jan;86(1 Pt 1):506-16.	
*		KORN et al., Gene expression analysis using single molecule detection. <i>Nucleic Acids Res.</i> 2003 Aug 15;31(16):e89.	
*		LI et al., Ultrasensitive coincidence fluorescence detection of single DNA molecules. <i>Anal Chem.</i> 2003 Apr 1;75(7):1664-70. Abstract Only.	
		LI et al., Molecule by molecule direct and quantitative counting of antibody-protein complexes in solution. <i>Anal Chem.</i> 2004 Aug 1;76(15):4446-51.	
		LI et al., Fluorescence studies of single biomolecules. <i>Biochem Soc Trans.</i> 2004 Nov;32(Pt 5):753-6. Abstract Only.	
		NOLAN et al., A simple quenching method for fluorescence background reduction and its application to the direct, quantitative detection of specific mRNA. <i>Anal Chem.</i> 2003 Nov 15;75(22):6236-43. Abstract Only.	
*		SHERA et al., Detection of single fluorescent molecules. <i>Chem Phys Letts.</i> 1990 Nov23;174(6):553-7.	
*		SHORTREED et al., High-throughput single-molecule DNA screening based on electrophoresis. <i>Anal Chem.</i> 2000 Jul 1;72(13):2879-85.	
*		SOPER et al., Detection and identification of single molecules in solution. <i>J Opt Soc Am B.</i> 1992; 9(10):1761-9.	
		WINKLER et al., Confocal fluorescence coincidence analysis: an approach to ultra high-throughput screening. <i>Proc Natl Acad Sci U S A.</i> 1999 Feb 16;96(4):1375-8.	

\*a copy of this reference is not provided as it was previously cited by or submitted to the office in a prior application, Serial No. 10/448,264, filed May 28, 2003, and relied upon for an earlier filing date under 35 U.S.C. 120 (continuation, continuation-in-part, and divisional applications).

[NOTE – No copies of U.S. patents, published U.S. patent applications, or pending, unpublished patent applications stored in the USPTO's Image File Wrapper (IFW) system, are included. See 37 CFR §1.98 and 1287OG163. Copies of all other patent(s), publication(s), unpublished, pending U.S. patent applications, or other information listed are provided as required by 37 CFR §1.98 unless 1) such copies were provided in an IDS in an earlier application that complies with 37 CFR §1.98, and 2) the earlier application is relied upon for an earlier filing date under 35 U.S.C. §120.]

EXAMINER:	DATE CONSIDERED:
-----------	------------------

# EXAMINER: Initial if reference considered whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.